

What is claimed is:

1. A method for delivering a treatment fluid to an interval of a subterranean formation while drilling, comprising the steps of:
  - (a) delivering a drill-in fluid to a drill bit drilling a well bore in the interval;
  - (b) removing drill cuttings from the well bore; and
  - (c) injecting the treatment fluid into the interval, wherein step (c) is performed simultaneously with steps (a) and (b).
2. A method for delivering a treatment fluid to an interval according to claim 1, further comprising the step of injecting another treatment fluid into the interval following step (c) and simultaneously with steps (a) and (b).
3. A method for delivering a treatment fluid to an interval according to claim 2, wherein the treatment fluid injected in step (c) comprises a consolidation agent and the another treatment fluid comprises an overflush fluid.
4. A method for delivering a treatment fluid to an interval according to claim 3, wherein the consolidation agent comprises a curable epoxy resin.
5. A method for delivering a treatment fluid to an interval according to claim 4, wherein the consolidation agent comprises a resin selected from the group consisting of a phenolic resin, a furan resin, or a mixture of phenolic and furan resins.

6. A method for delivering a treatment fluid to an interval according to claim 5, wherein the consolidation agent further comprises a hardener, a silane coupling agent, a surfactant and a diluent.

7. A method for delivering a treatment fluid to an interval according to claim 6, wherein the diluent comprises an aqueous soluble solvent and the concentration ratios of resin to solvent are between 1 to 0.2 and 1 to 20.

8. A method for delivering a treatment fluid to an interval according to claim 6, wherein the consolidation agent further comprises a flexibilizer compound.

9. A method for delivering a treatment fluid to an interval according to claim 3, wherein the overflush fluid comprises a completion brine and a surfactant.

10. A method for delivering a treatment fluid to an interval according to claim 1, wherein the treatment fluid is selected from the group consisting of tackifying agents, acids, gel breakers, enzymes, hydrolyzable esters, corrosion inhibitors, paraffin inhibitors, and scale inhibitors.

11. An apparatus for delivering a treatment fluid to an interval of a subterranean formation while drilling, comprising:

a first tube defined by an inner flow path and an outer surface;

a second tube defined by an inner surface and an outer surface, wherein the first tube is coaxially disposed within the second tube and a first annulus is formed between the outer surface of the first tube and the inner surface of the second tube;

a third tube defined by an inner surface and an outer surface, wherein the second tube is coaxially disposed within the third tube and a second annulus is formed between the outer surface of the second tube and the inner surface of the third tube; and

an expandable bladder coupled to the outer surface of the second tube and an end of the third tube.

12. An apparatus for delivering a treatment fluid to an interval according to claim 11, further comprising a fourth tube defined by an inner surface and an outer surface, wherein the third tube is coaxially disposed within the fourth tube and a third annulus is formed between the outer surface of the third tube and the inner surface of the fourth tube.

13. An apparatus for delivering a treatment fluid to an interval according to claim 12, further comprising an expandable bladder coupled to the outer surface of the third tube and an end of the fourth tube.

14. An apparatus for delivering a treatment fluid to an interval according to claim 11, wherein the expandable bladder comprises at least one fluid communication port, which opens in communication with the second annulus and at least one exit port that opens to a well bore formed in the subterranean formation, and wherein the expandable bladder further couples to an end of the third tube.

15. An apparatus for delivering a treatment fluid to an interval according to claim 14, wherein the treatment fluid is pumped down the second annulus under pressure and the at least one communication port and the at least one exit port in the expandable bladder open in response to the pressure.

16. An apparatus for delivering a treatment fluid to an interval according to claim 13, wherein the expandable bladder coupled to the outer surface of the third tube and an end of the fourth tube comprises at least one fluid communication port, which opens in communication with the third annulus and at least one exit port that opens to a well bore formed in the subterranean formation.

17. An apparatus for delivering a treatment fluid to an interval according to claim 16, wherein another treatment fluid is pumped down the third annulus under pressure and the at least one communication port and the at least one exit port in the expandable bladder coupled to the outer surface of the third tube and an end of the fourth tube open in response to the fluid pressure.

18. An apparatus for delivering a treatment fluid to an interval according to claim 11, further comprising a drill bit selected from the group consisting of a rotary drill bit and a hydraulically operated bit, and wherein the drill bit is coupled to the an end of the first tube and an end of the second tube.

19. An apparatus for delivering a treatment fluid to an interval according to claim 18, wherein a drill-in fluid is delivered to the drill bit through the inner flow path formed within the first tube and drill cuttings are removed from the drill bit through the first annulus.

20. An apparatus for delivering a treatment fluid to an interval according to claim 18, wherein a drill-in fluid is delivered to the drill bit through the first annulus and drill cuttings are removed from the drill bit through the internal flow path formed within the first tube.

21. An apparatus for delivering a treatment fluid to an interval according to claim 11, wherein the treatment fluid is selected from the group consisting of consolidation agents, tackifying agents, acids, gel breakers, enzymes, hydrolyzable esters, corrosion inhibitors, paraffin inhibitors, scale inhibitors and overflush fluids.

22. An apparatus for delivering a treatment fluid to an interval of a subterranean formation while drilling, comprising:

a first tube defined by an inner flow path and an outer surface;

a second tube defined by an inner surface and an outer surface, wherein the first tube is coaxially disposed within the second tube and a first annulus is formed between the outer surface of the first tube and the inner surface of the second tube;

at least one conduit secured to the outer surface of the second tube; and

at least one expandable bladder coupled to the outer surface of the second tube and an end of the at least one conduit.

23. An apparatus for delivering a treatment fluid to an interval according to claim 22, wherein two pairs of oppositely disposed conduits are secured to the outer surface of the second tube with the at least one expandable bladder being secured to an end of each conduit of one of the conduit pairs.

24. An apparatus for delivering a treatment fluid to an interval according to claim 23, wherein one pair of oppositely disposed conduits is circumferentially offset from the other pair of oppositely disposed conduits by approximately 90 degrees.

25. An apparatus for delivering a treatment fluid to an interval according to claim 24, wherein another expandable bladder is coupled to an end of each conduit of the other conduit pair.

26. An apparatus for delivering a treatment fluid to an interval according to claim 25, wherein the expandable bladders are axially disposed from one another.

27. An apparatus for delivering a treatment fluid to an interval according to claim 22, wherein the at least one expandable bladder comprises at least one fluid communication port, which opens in communication with the at least one conduit and at least one exit port that opens to a well bore formed in the subterranean formation.

28. An apparatus for delivering a treatment fluid to an interval according to claim 27, wherein the treatment fluid is pumped down the at least one conduit under pressure and the at least one communication port and the at least one exit port in the at least one expandable bladder open in response to the pressure.

29. An apparatus for delivering a treatment fluid to an interval according to claim 22, further comprising a drill bit selected from the group consisting of a rotary drill bit and a hydraulically operated bit, and wherein the drill bit is coupled to an end of the first tube and an end of the second tube.

30. An apparatus for delivering a treatment fluid to an interval according to claim 29, wherein a drill-in fluid is delivered to the drill bit through the inner flow path formed within the first tube and drill cuttings are removed from the drill bit through the first annulus.

31. An apparatus for delivering a treatment fluid to an interval according to claim 22, wherein the treatment fluid is selected from the group consisting of consolidation agents, tackifying agents, acids, gel breakers, enzymes, hydrolyzable esters, corrosion inhibitors, paraffin inhibitors, scale inhibitors and overflush fluids.